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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,682	07/20/2006	Reinhold J. Leyrer	293590US0PCT	6542
22850	7590	04/03/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			CHIN, HUI H	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			04/03/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/586,682	LEYRER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	HUI CHIN	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 February 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3 and 7-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3 and 7-51 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

1. This office action is in response to the Amendment filed on 2/25/2009.

Claims 4-6 have been cancelled, claims 1-3 and 7-51 are pending. In view of the Amendment, the rejections on claims 1-5, 7, 9, 11-12, 14, 20, and 25-27 under 35 U.S.C. 102(b) as being anticipated by Huffer et al. are withdrawn and this Office Action is made as second non-final rejection because of new ground rejections being made.

### ***Claim Objections***

2. Claim 24 is objected to because of the following informalities:

Claim 24: “15 000” is suggested to be changed to -- 15,000 --.

Claim 49 is objected to because of the following informalities:

Claim 49: “15 000” is suggested to be changed to -- 15,000 --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

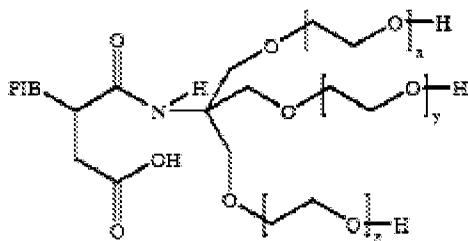
4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claim Rejections - 35 USC § 102/103***

5. Claims 1-3, 7, 9, 11-12, 19-20, 25-28, 30-32, 35-37, 39-40, 45-46, and 50-51 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Huffer et al. (US 2005/0090611).

Huffer et al. disclose an oil-in-water emulsion which contains a) one or more of amphiphilic compounds which are composed of a hydrophobic compound which is formed from a polyisobutylenes which have a high content of terminal double bonds ( $\geq$  85 mol %), and a hydrophilic compound which can be formed from reaction products of alkanolamines with ethylene oxide which reads on monoaminoethylene oxide, b) oil, and c) water (claims 24, 44; [0001]; [0011] - [0029]; [0091]; [0094]; [0101]; [0136]).



Huffer et al. disclose a procedure to make the emulsion, comprising one or more hydrophilic units, which is substantially identical to the invention. Huffer et al. therefore anticipate the instantly claimed invention with the understanding that the hydrophilic units per Huffer et al. are from monoaminoethylene oxide as the claimed invention. It is tenable that the claimed limitation would well be met since the reactants to make the hydrophilic units are essentially the same as the claimed components and in the absence of the USPTO to have at its disposal the tools and facilities deemed necessary to make physical determinations of this sort. Consult **In re Best** (195 USPQ 430).

The limitations of claims 2, 30 can be found in Huffer et al. at paragraph [0132], where it discloses 0.2 to 10% by weight of at least one amphiphilic polymer.

The limitations of claims 3, 28, and 31-32 can be found in Huffer et al. at paragraph [0101], where it discloses polyisobutylenes having  $\geq 85$  mol % of terminal double bonds.

The limitations of claims 7 and 37 can be found in Huffer et al. at paragraphs [0079] – [0080], where it discloses the functionalization of polyisobutene with polar groups.

The limitations of claims 9 and 39 can be found in Huffer et al. at paragraphs [0011] – [0016], where it discloses the reaction of polyisobutenes with alkylene oxides.

The limitations of claim 11 can be found in Huffer et al. at paragraph [0201], where it discloses the AB structure.

The limitations of claims 12 and 40 can be found in Huffer et al. at claim 44 and paragraph [0042], where it discloses blends of amphiphilic polymers.

The limitations of claims 19 and 45 can be found in Huffer et al. at Example 1, where it discloses the PIBSA.

The limitations of claims 20 and 46 can be found in Huffer et al. at Example 1 and paragraphs [0011] - [0043], where it discloses the process for the preparation of aqueous polymer dispersions.

The limitations of claims 25-27 and 50-51 can be found in Huffer et al. at paragraph [0187], where it discloses the application in paint systems and coating systems.

The limitations of claim 35 can be found in Huffer et al. at paragraph [0097], where it discloses the hydrophilic unit is ethylene oxide.

The limitations of claim 36 can be found in Huffer et al. at paragraphs [0091] and [0094], where it discloses the reaction product of alkanolamines with ethylene oxide which reads on monoaminoethylene oxide.

6. Claims 8 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huffer et al. (US 2005/0090611) in view of Lange et al. (US 2004/0171759).

The disclosure of Huffer et al. is adequately set forth in paragraph 4 and is incorporated herein by reference.

Huffer et al. are silent on the functionalization of polyisobutenes.

Lange et al. disclose the functionalization of polyisobutenes ([0019] – [0028]) to provide a polymer composition which has good mechanical properties and/or good interfacial properties, is easy to process and is stable to demixing ([0006]). In light of

such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the functionalized polyisobutenes in the disclosure of Huffer et al. with the expected success because Lange et al. has demonstrated that the functionalized polyisobutenes can be used to achieve the improved properties.

7. Claims 10, 13-14, 22-24, 29, 41, and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huffer et al. (US 2005/0090611) in view of Deroo et al. (US 2003/0225168).

The disclosure of Huffer et al. is adequately set forth in paragraph 4 and is incorporated herein by reference.

Huffer et al. are silent on the ABA structure.

Deroo et al. disclose an emulsion comprising a (block A)-(block B) diblock copolymers, a (block A)-(block B)-(block A) triblock copolymer, or a (block B)-(block A)-(block B) triblock copolymer, wherein block A is a hydrophilic block and block B is a hydrophobic block to better control the stability or the droplets size of an emulsion, wherein the amount of block copolymer is from 0.1 to 10 weight % (claims 1, 6). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the ABA structure in the disclosure of Huffer et al. with the expected success.

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8. Claims 15-18, 21, and i42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huffer et al. (US 2005/0090611) in view of Allgaier et al. (US Patent 6,677,293).

The disclosure of Huffer et al. is adequately set forth in paragraph 4 and is incorporated herein by reference.

Huffer et al. are silent on the molecular weight of the hydrophilic unit.

Allgaier et al. disclose the block copolymer having a water-soluble block and a water-insoluble block wherein the molecular weights of hydrophobic and hydrophilic blocks are between 500 and 60,000 (col. 2 lines 1-2, lines 21-22). Allgaier et al. further disclose that the resulting block copolymer raise the efficiency of surfactants and reduce the interfacial surface tension between water and oil (col. 1 lines 47-50). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the block copolymer disclosed by Allgaier et al. with the expected success because Allgaier et al. has demonstrated that such block copolymer can be used to improve the properties.

9. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huffer et al. (US 2005/0090611) in view of Candau et al. (US 2003/0129151).

The disclosure of Huffer et al. is adequately set forth in paragraph 4 and is incorporated herein by reference.

Huffer et al. are silent on the propylene oxide units.

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Deroo et al. disclose an amphiphilic copolymer comprising at least one hydrophilic block and at least one hydrophobic block wherein the block can be chosen from triblock copolymer of ethylene oxide and of propylene oxide (claim 4) to provide better stabilization in dispersions of insoluble organic compounds and for use in cosmetic compositions (abstract). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the propylene oxide units in the disclosure of Huffer et al. with the expected success.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUI CHIN whose telephone number is (571)270-7350. The examiner can normally be reached on Monday to Friday; 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/  
Primary Examiner, Art Unit 1796

/HC/